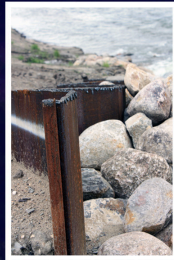


DEVILS LAKE

OUTLET ADVISORY UPDATE

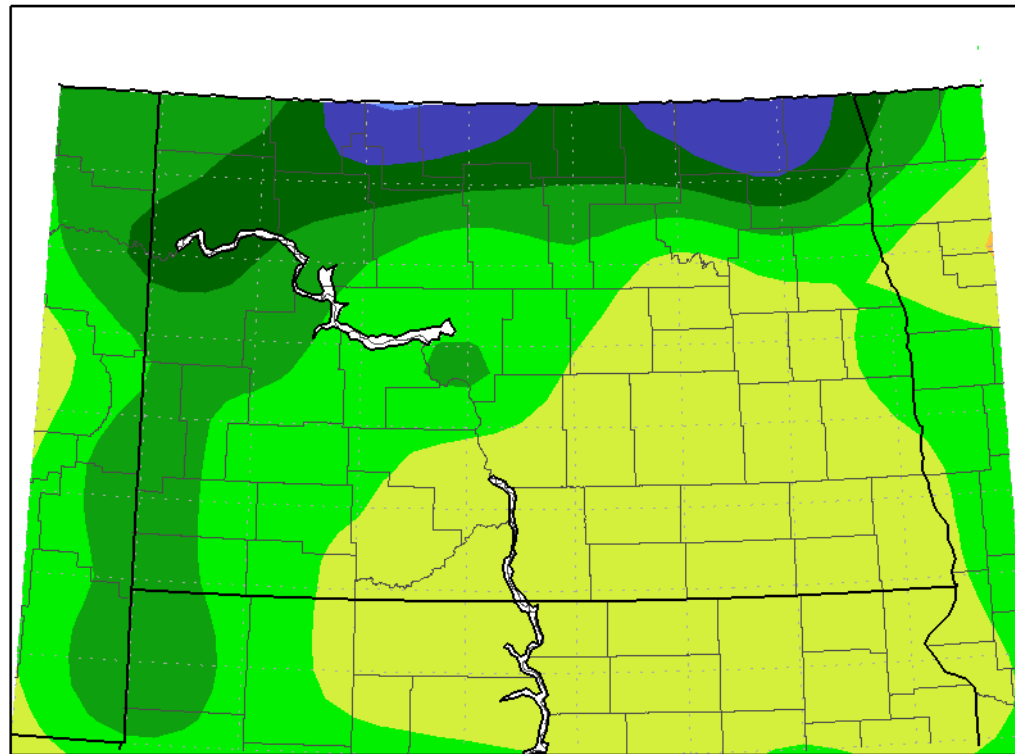


North Dakota State Water Commission

May 2016

ACCUMULATED PRECIPITATION

Accumulated Precipitation: Percent of Mean
September 1, 2015 to December 1, 2015



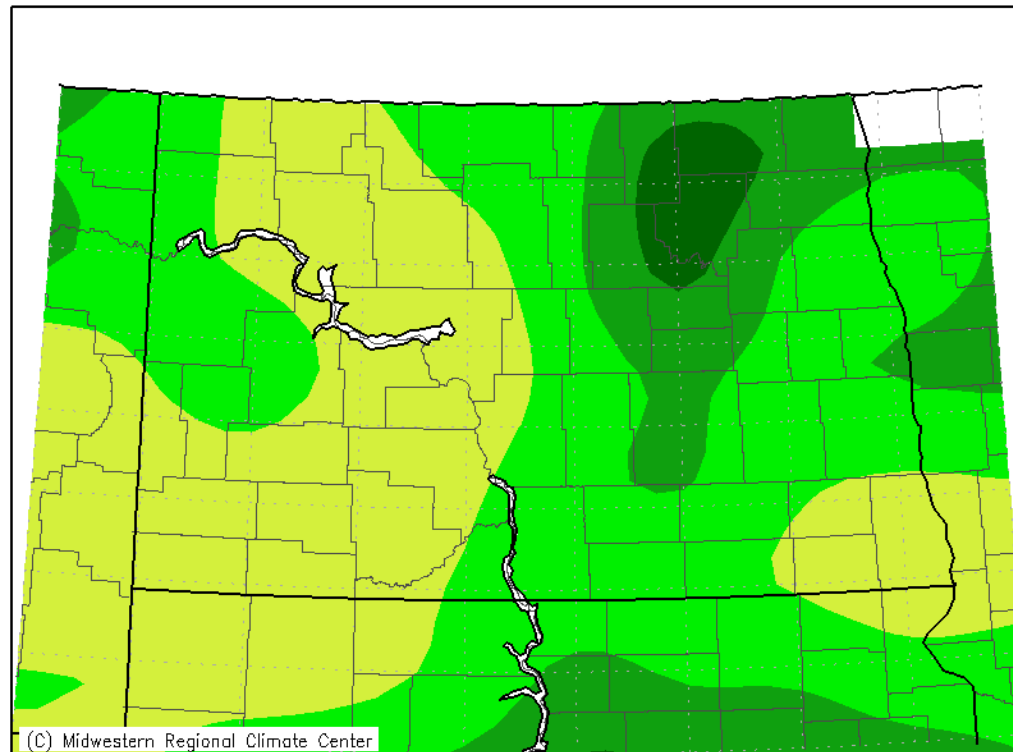
Mean period is 1981–2010.



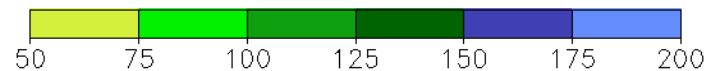
Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 1/27/2016 4:06:29 PM CST

ACCUMULATED SNOWFALL

Accumulated Snowfall: Percent of Mean
December 1, 2015 to March 22, 2016



Mean period is 1981–2010.



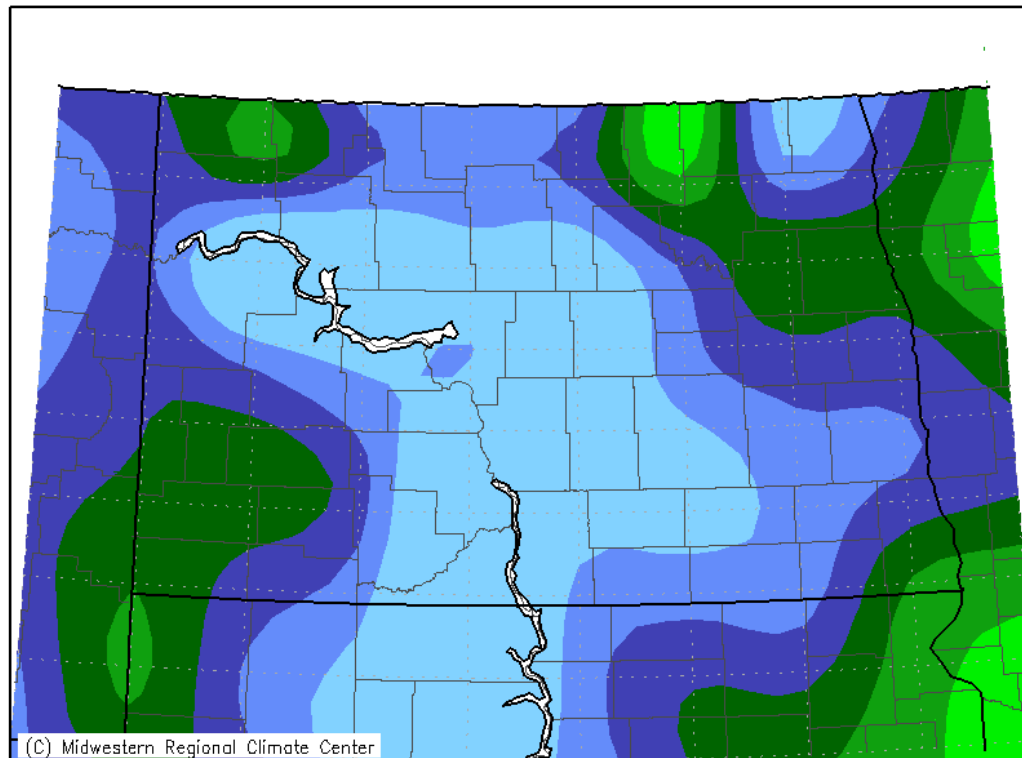
Midwestern Regional Climate Center

cli-MATE: MRCC Application Tools Environment

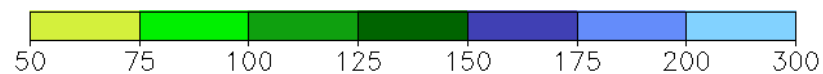
Generated at: 3/22/2016 3:36:11 PM CDT

RECENT PRECIPITATION

Accumulated Precipitation: Percent of Mean
March 22, 2016 to April 27, 2016



Mean period is 1981–2010.



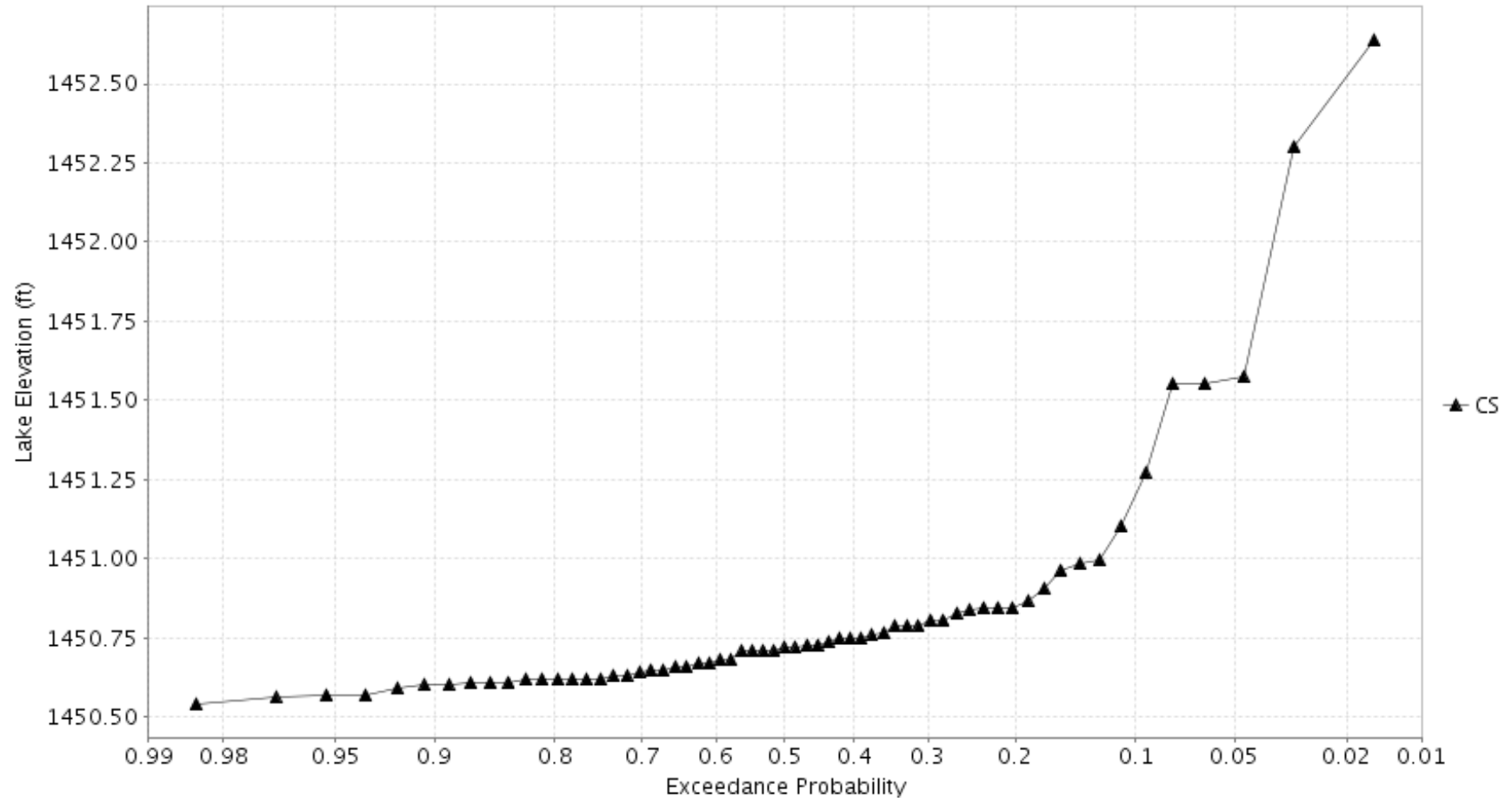
Midwestern Regional Climate Center

cli-MATE: MRCC Application Tools Environment

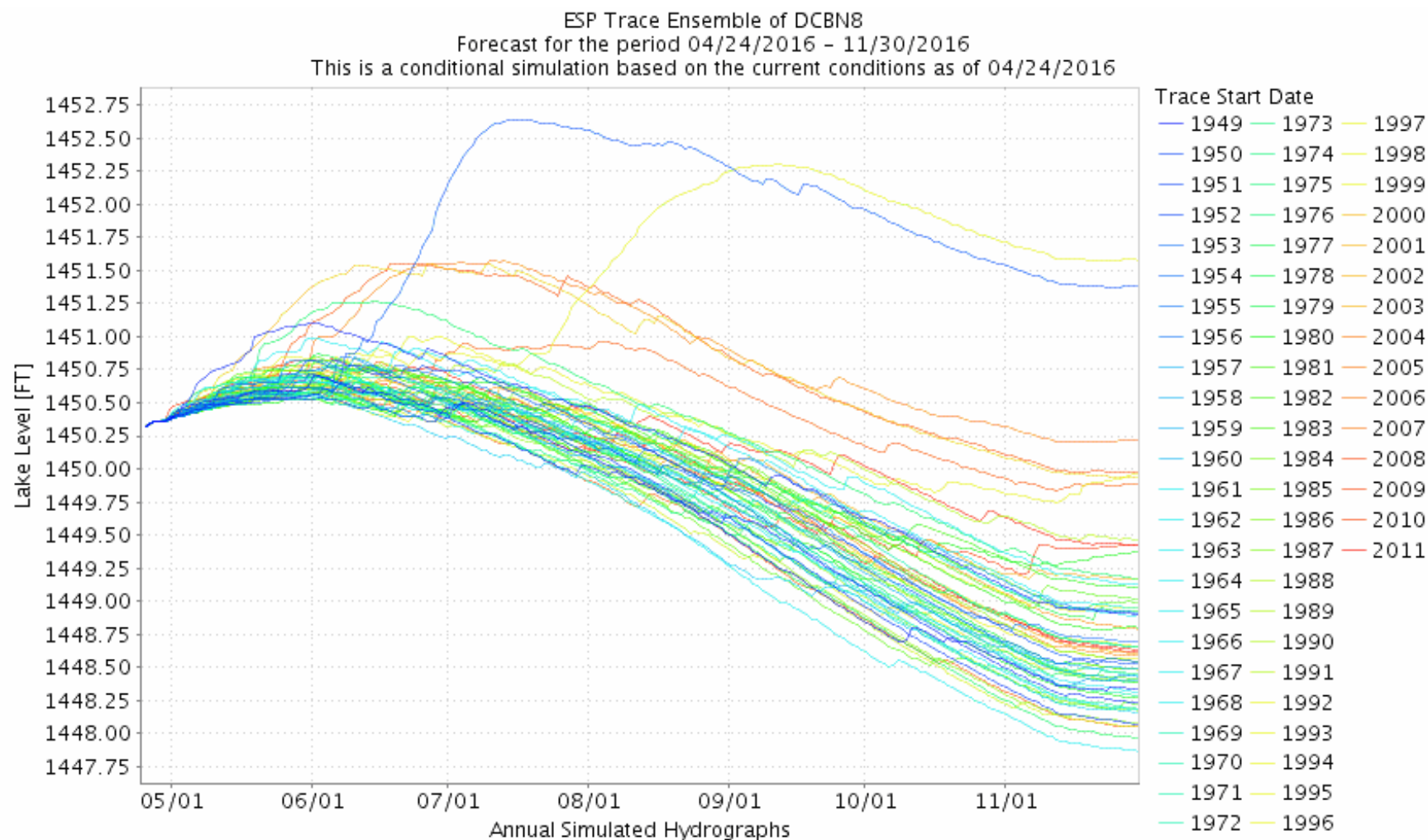
Generated at: 4/27/2016 11:06:45 AM CDT

PROBABILITY OF LAKE RISE

Probability of Rising to High Lake Levels on the DCBN8
Forecast for the period 04/24/2016 - 09/30/2016
This is a conditional simulation based on the current conditions as of 04/24/2016



DEVILS LAKE AT CREEL BAY

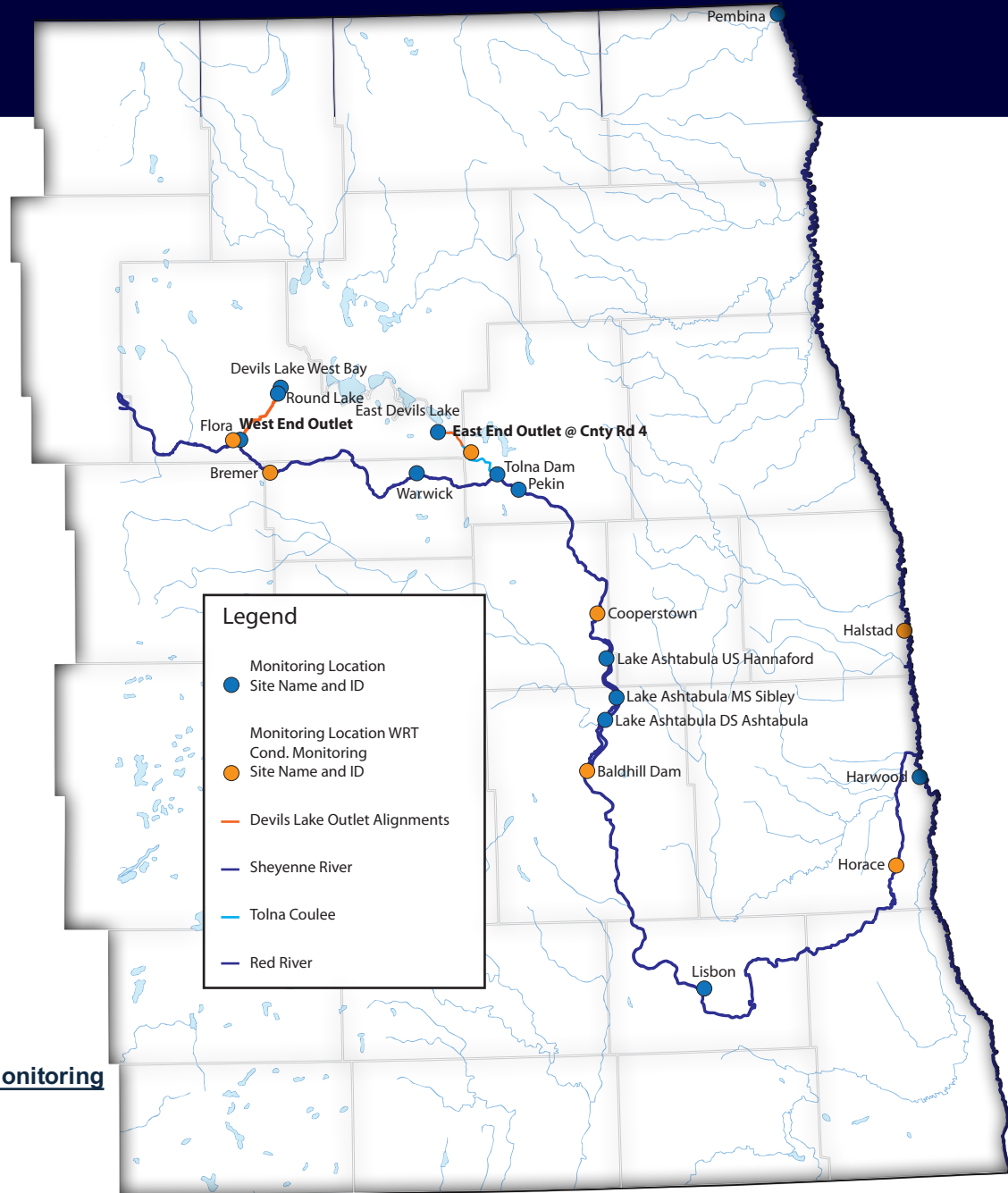


2016 EXCEEDANCE PROBABILITY

PROBABILITY	90%	50%	10%
Surface Elev.	1450.6 ft.-msl	1450.7 ft.-msl	1451.2 ft.-msl
Increase in Elev.	0.3 ft.	0.4 ft.	0.9 ft.
Increase in Vol.	45,220 ac. ft.	60,480 ac. ft.	138,200 ac. ft.
Increase in Area	2,670 ac.	3,580 ac.	8,200 ac.

From NWS Exceedance Probability for Devils Lake from period 4/24/2016 to 9/30/2016. Increases in depth, volume and area from present elevation (1450.3 ft.-msl) to probable values is shown.

2016 WATER QUALITY SAMPLING LOCATIONS



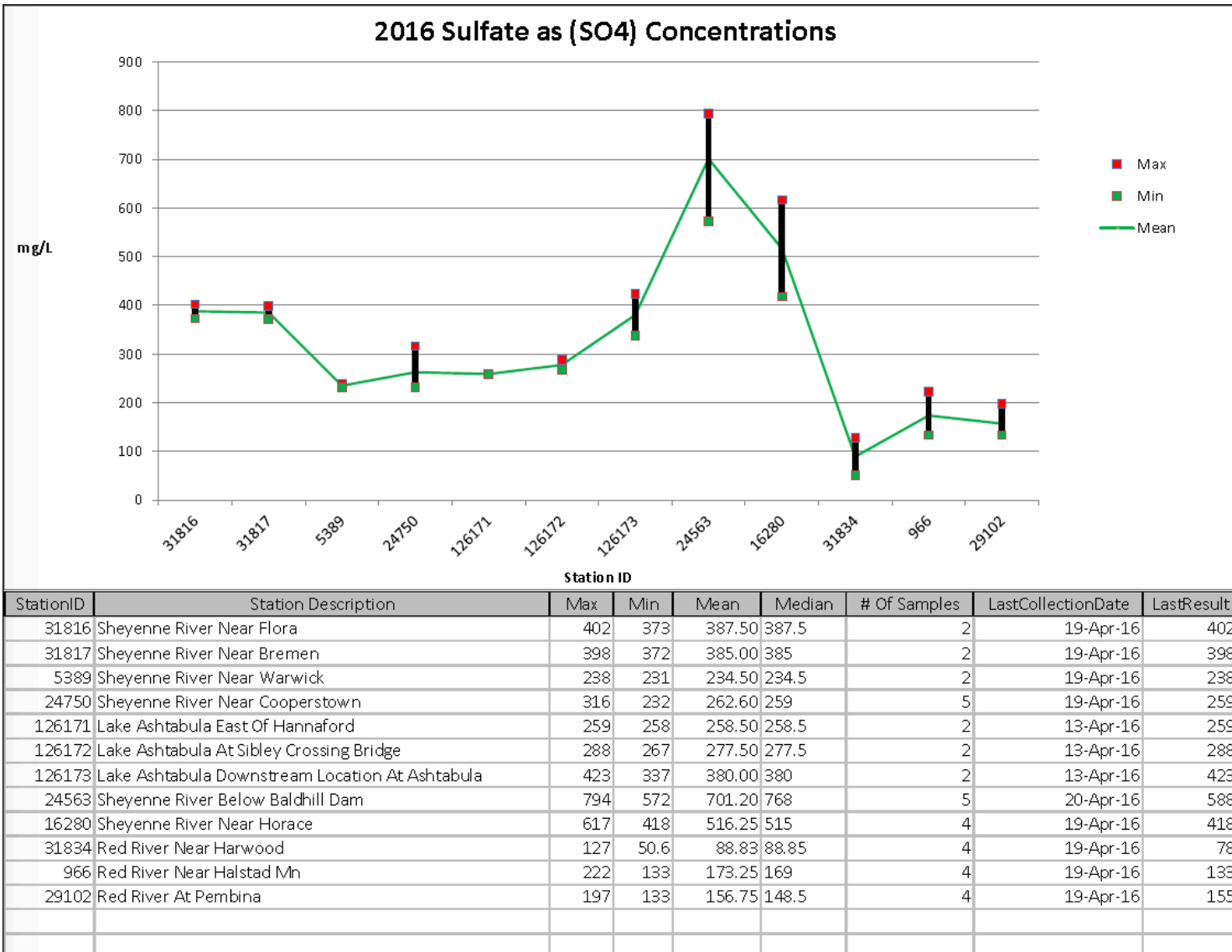
Results At:

<http://mapservice.swc.nd.gov/index.phtml?active=dlmonitoring>

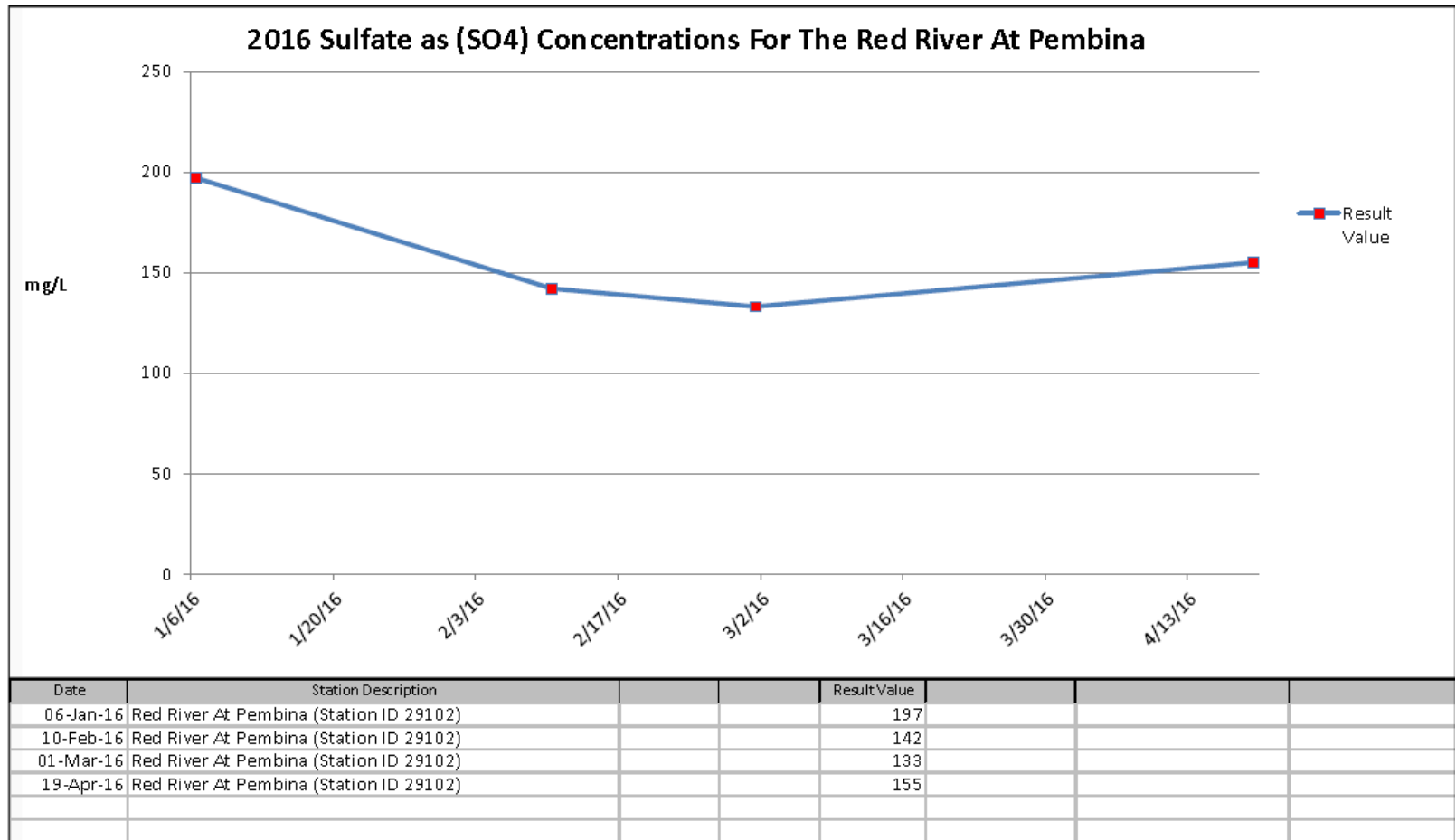
2016 WATER QUALITY MONITORING

- 20 Monitoring Locations
- 600 to 700 samples predicted for 2016 pumping season
- pH and Sulfate analyzed for every sample
- Frequent analysis of TDS, TSS, Major Ions, Nutrients, Trace Metals and Bromide

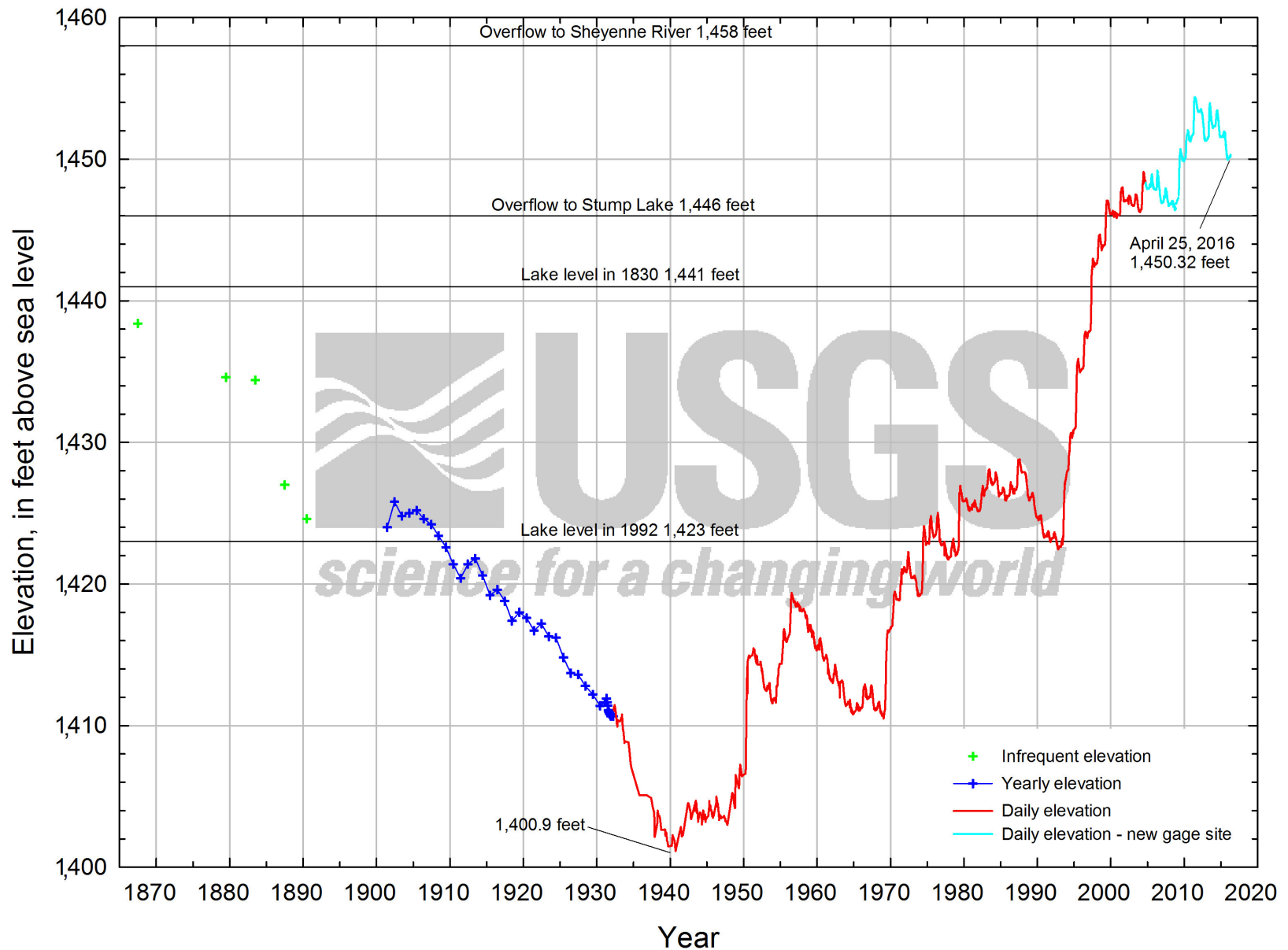
2016 SULFATE LEVELS



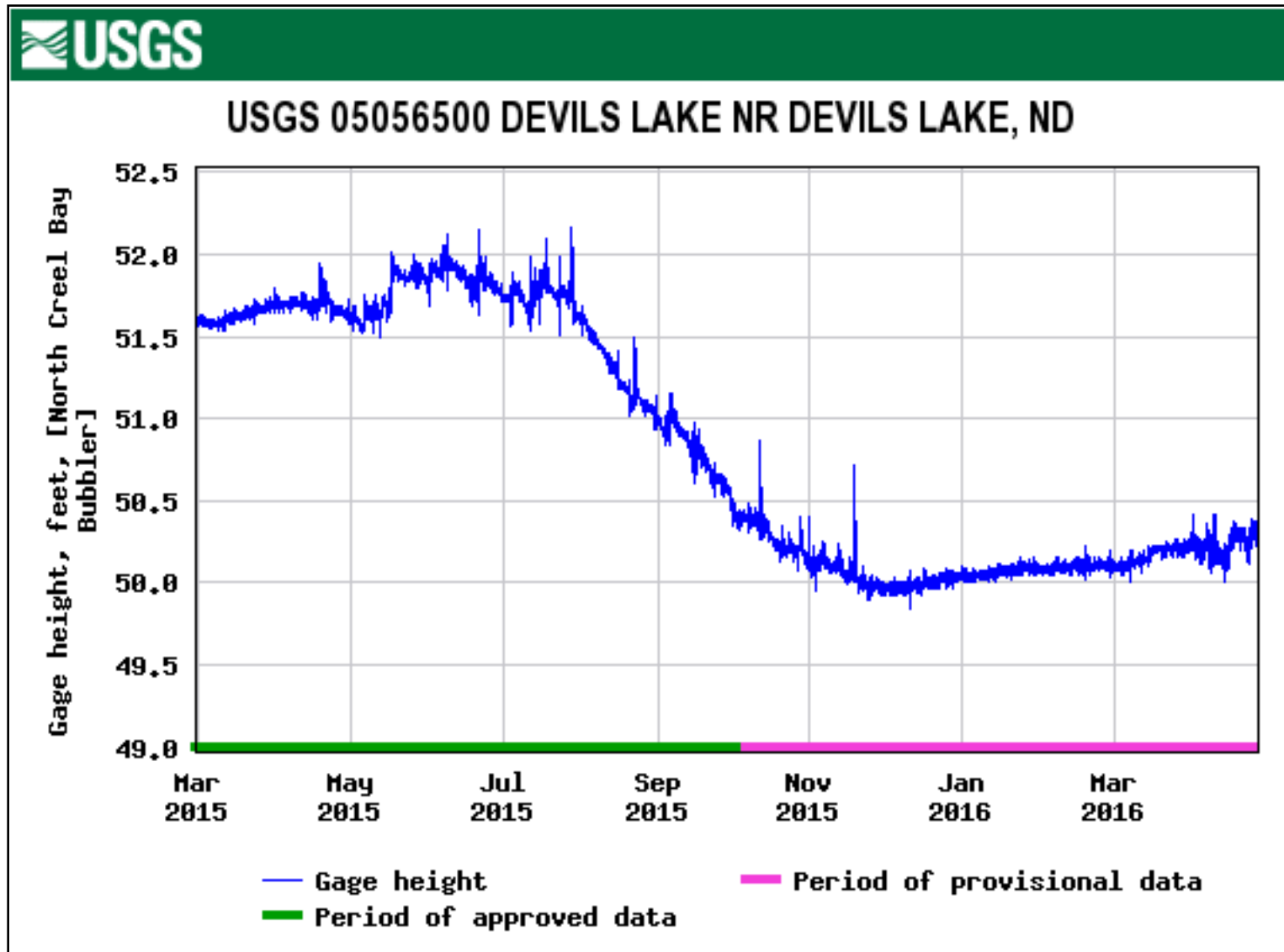
2016 SULFATE AT PEMBINA



PERIOD OF RECORD LAKE ELEVATIONS

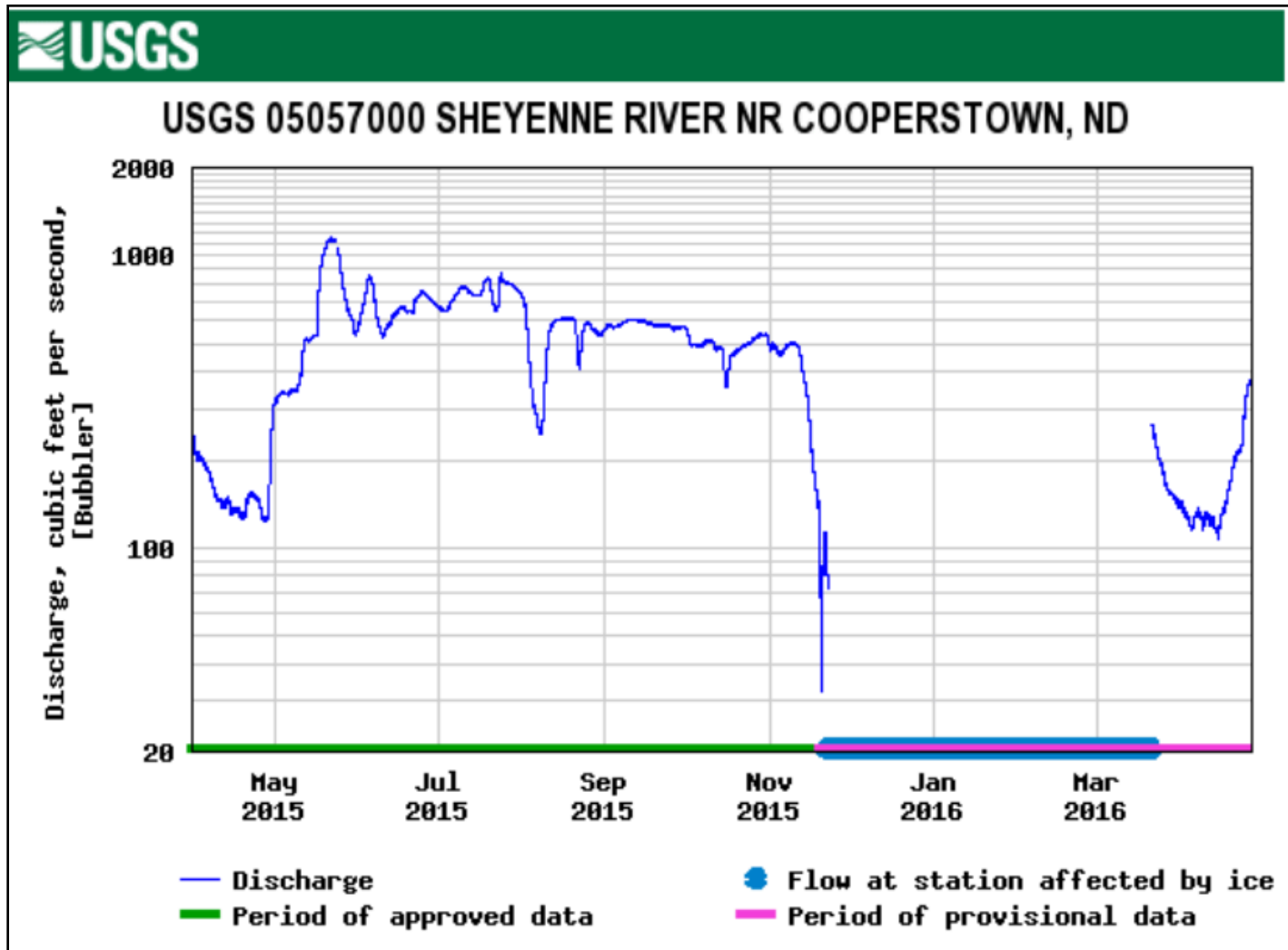


PAST YEAR LAKE ELEVATION



SHEYENNE RIVER FLOWS

Cooperstown Gage (1 Year)

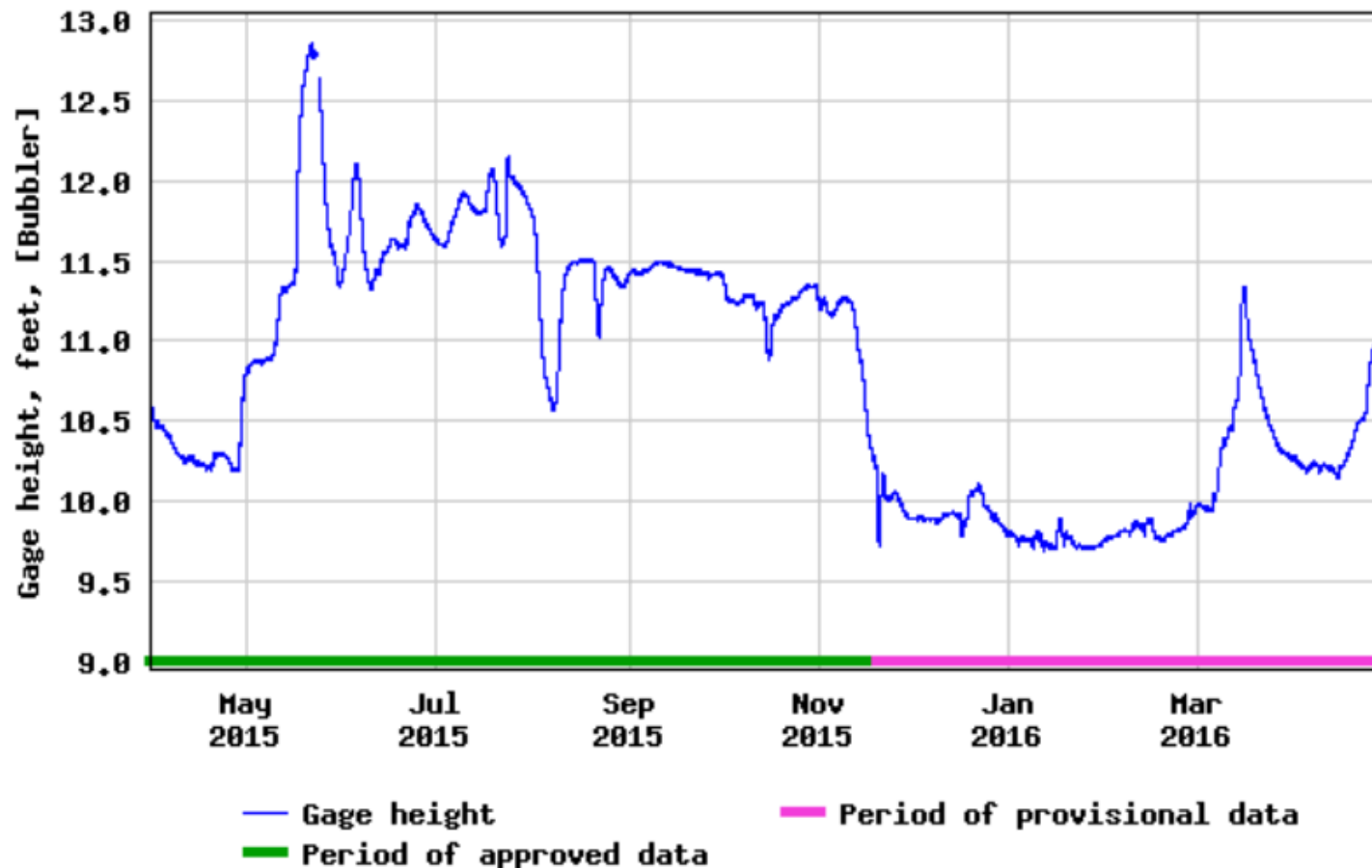


SHEYENNE RIVER STAGE

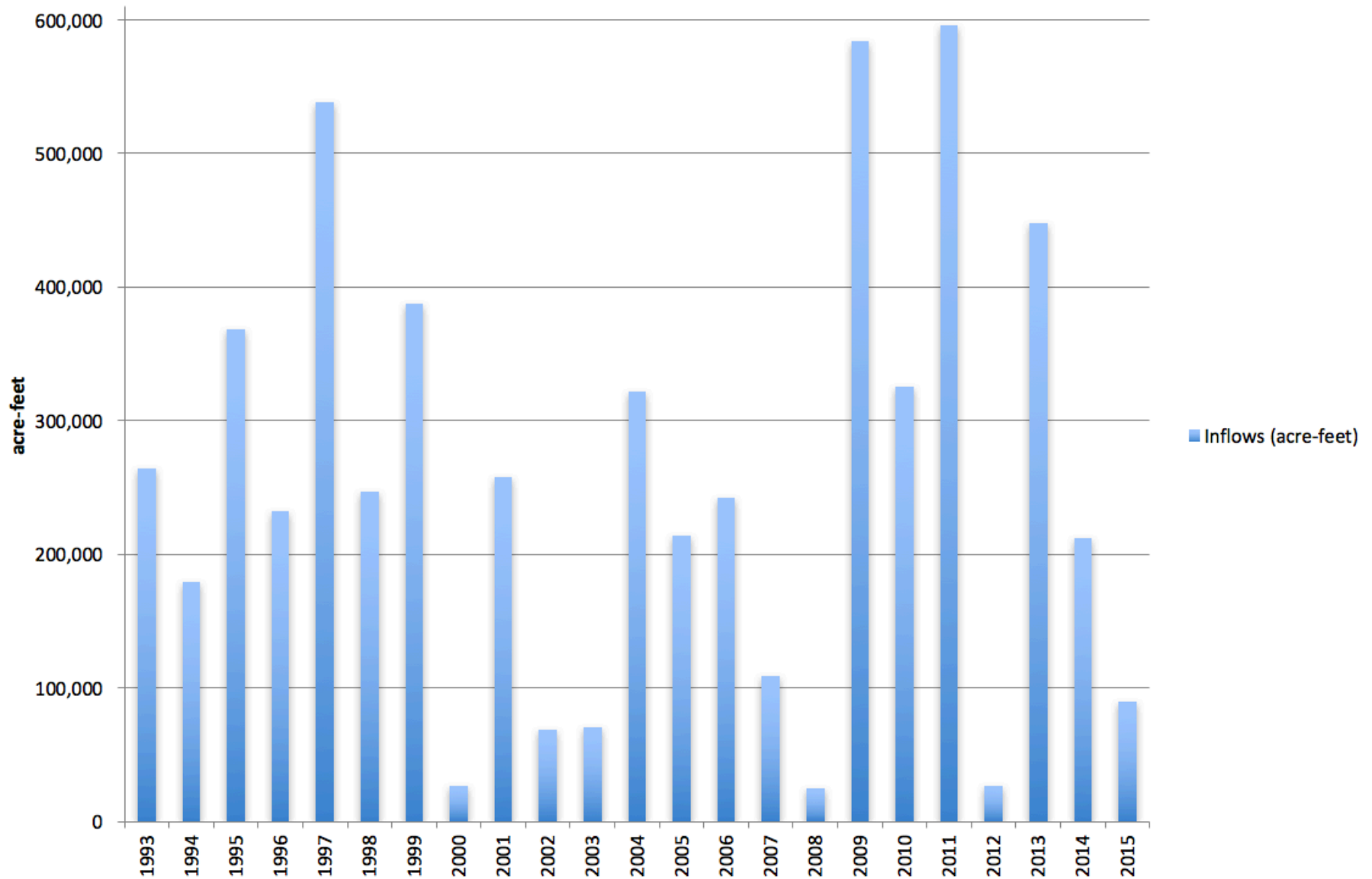
Cooperstown Gage (1 Year)



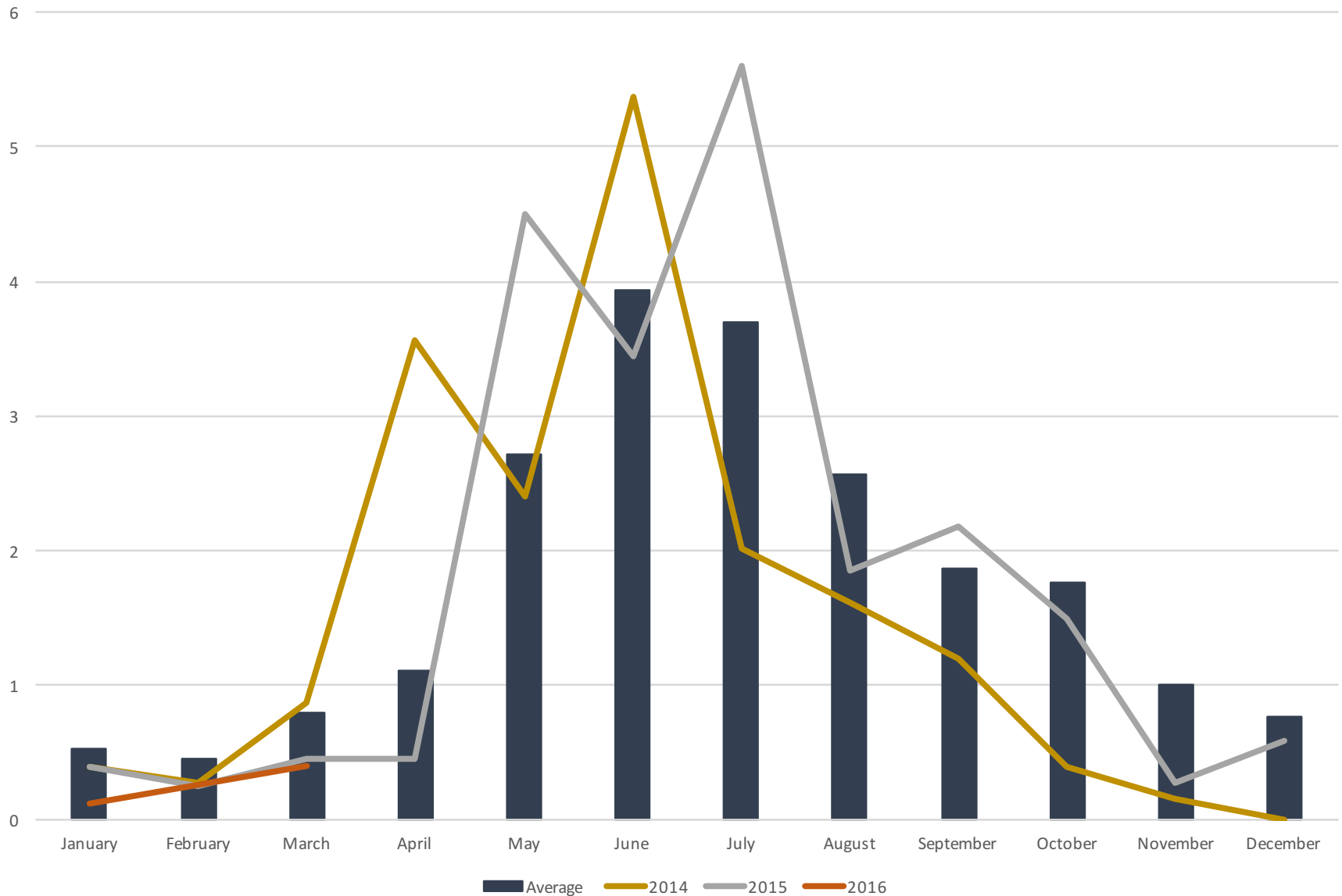
USGS 05057000 SHEYENNE RIVER NR COOPERSTOWN, ND



DEVILS LAKE INFLOWS (1993-2015)



DEVILS LAKE PRECIPITATION (2014-2016)



OUTLET DISCHARGES (2007-2015)

